

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/520,210
Source: PG/10
Date Processed by STIC: 1/13/05

ENTERED



PCT

RAW SEQUENCE LISTING

DATE: 01/13/2005

PATENT APPLICATION: US/10/520,210

TIME: 17:12:13

Input Set : A:\seqlist.txt

Output Set: N:\CRF4\01132005\J520210.raw

```

3 <110> APPLICANT: Yocum , R. Rogers
4     Patterson, Thomas A.
5     Pero, Janice G.
6     Hermann, Theron
8 <120> TITLE OF INVENTION: MICROORGANISMS AND PROCESSES FOR ENHANCED PRODUCTION OF
9     PANTOTHENATE
11 <130> FILE REFERENCE: BGI-154US
C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/520,210
C--> 13 <141> CURRENT FILING DATE: 2005-01-03
13 <150> PRIOR APPLICATION NUMBER: PCT/US2003/021336
14 <151> PRIOR FILING DATE: 2003-07-02
16 <160> NUMBER OF SEQ ID NOS: 31
18 <170> SOFTWARE: PatentIn Ver. 2.0
20 <210> SEQ ID NO: 1
21 <211> LENGTH: 194
22 <212> TYPE: DNA
23 <213> ORGANISM: Artificial Sequence
25 <220> FEATURE:
26 <223> OTHER INFORMATION: Description of Artificial Sequence:promoter
27     sequence
29 <220> FEATURE:
30 <221> NAME/KEY: -35_signal
31 <222> LOCATION: (136)..(141)
33 <220> FEATURE:
34 <221> NAME/KEY: -10_signal
35 <222> LOCATION: (159)..(164)
37 <400> SEQUENCE: 1
38 gctattgacg acagctatgg ttactgtgcc accaaccaaa actgtgctca gtaccgccaa 60
39 tatttctccc ttgaggggta caaagagggtg tccctagaag agatccacgc tgtgtaaaaa 120
40 ttttacaaaa aggtattgac tttccctaca ggggtgtgtaa taatttaatt acaggcgggg 180
41 gcaaccccg cgtgt                                     194
44 <210> SEQ ID NO: 2
45 <211> LENGTH: 163
46 <212> TYPE: DNA
47 <213> ORGANISM: Artificial Sequence
49 <220> FEATURE:
50 <223> OTHER INFORMATION: Description of Artificial Sequence:promoter
51     sequence
53 <220> FEATURE:
54 <221> NAME/KEY: -35_signal
55 <222> LOCATION: (113)..(118)
57 <220> FEATURE:
58 <221> NAME/KEY: -10_signal

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59 <222> LOCATION: (136)..(141)
63 <400> SEQUENCE: 2
64 gcctacctag cttccaagaa agatataccta acagcacaag agcggaaaga tgttttgttc 60
65 tacatccaga acaacctctg ctaaaattcc tgaaaaattt tgcaaaaagt tgttgacttt 120
66 atctacaagg tgtggtataa taatcttaac aacagcagga cgc 163
69 <210> SEQ ID NO: 3
70 <211> LENGTH: 127
71 <212> TYPE: DNA
72 <213> ORGANISM: Artificial Sequence
74 <220> FEATURE:
75 <223> OTHER INFORMATION: Description of Artificial Sequence:promoter
76     sequence
78 <220> FEATURE:
79 <221> NAME/KEY: -35_signal
80 <222> LOCATION: (34)..(39)
82 <220> FEATURE:
83 <221> NAME/KEY: -10_signal
84 <222> LOCATION: (58)..(63)
86 <220> FEATURE:
87 <221> NAME/KEY: -35_signal
88 <222> LOCATION: (75)..(80)
90 <220> FEATURE:
91 <221> NAME/KEY: -10_signal
92 <222> LOCATION: (98)..(103)
94 <400> SEQUENCE: 3
95 gaggaatcat agaattttgt caaaataatt ttattgacaa cgtcttatta acgttgatat 60
96 aatttaaatt ttatttgaca aaaatgggct cgtgttgtag aataaatgta gtgagggtgga 120
97 tgcaatg 127
100 <210> SEQ ID NO: 4
101 <211> LENGTH: 24
102 <212> TYPE: DNA
103 <213> ORGANISM: Artificial Sequence
105 <220> FEATURE:
106 <223> OTHER INFORMATION: Description of Artificial Sequence:ribosome
107     binding site
109 <400> SEQUENCE: 4
110 taaacatgag gaggagaaaa catg 24
112 <210> SEQ ID NO: 5
113 <211> LENGTH: 28
114 <212> TYPE: DNA
115 <213> ORGANISM: Artificial Sequence
117 <220> FEATURE:
118 <223> OTHER INFORMATION: Description of Artificial Sequence:ribosome
119     binding site
121 <400> SEQUENCE: 5
122 attcgagaaa tggagagaat ataatatg 28
124 <210> SEQ ID NO: 6
125 <211> LENGTH: 13
126 <212> TYPE: DNA

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127 <213> ORGANISM: Artificial Sequence
129 <220> FEATURE:
130 <223> OTHER INFORMATION: Description of Artificial Sequence:ribosome
131     binding site
133 <400> SEQUENCE: 6
134 agaaaggagg tga                                     13
136 <210> SEQ ID NO: 7
137 <211> LENGTH: 23
138 <212> TYPE: DNA
139 <213> ORGANISM: Artificial Sequence
141 <220> FEATURE:
142 <223> OTHER INFORMATION: Description of Artificial Sequence:ribosome
143     binding site
145 <220> FEATURE:
146 <221> NAME/KEY: misc_feature
147 <222> LOCATION: 17, 18, 19, 20
148 <223> OTHER INFORMATION: n = a, t, c, or g
150 <400> SEQUENCE: 7
W--> 151 ttaagaaagg aggtgannnn atg                               23
153 <210> SEQ ID NO: 8
154 <211> LENGTH: 23
155 <212> TYPE: DNA
156 <213> ORGANISM: Artificial Sequence
158 <220> FEATURE:
159 <223> OTHER INFORMATION: Description of Artificial Sequence:ribosome
160     binding site
162 <220> FEATURE:
163 <221> NAME/KEY: misc_feature
164 <222> LOCATION: 16, 17, 18, 19, 20
165 <223> OTHER INFORMATION: n = a, c, t, or g
167 <400> SEQUENCE: 8
W--> 168 ttagaaagga ggtgannnnn atg                               23
170 <210> SEQ ID NO: 9
171 <211> LENGTH: 23
172 <212> TYPE: DNA
173 <213> ORGANISM: Artificial Sequence
175 <220> FEATURE:
176 <223> OTHER INFORMATION: Description of Artificial Sequence:ribosome
177     binding site
179 <220> FEATURE:
180 <221> NAME/KEY: misc_feature
181 <222> LOCATION: 14, 15, 16, 17, 18, 19, 20
182 <223> OTHER INFORMATION: n = a, c, t, or g
184 <400> SEQUENCE: 9
W--> 185 agaaaggagg tgannnnnnn atg                               23
187 <210> SEQ ID NO: 10
188 <211> LENGTH: 22
189 <212> TYPE: DNA
190 <213> ORGANISM: Artificial Sequence

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RAW SEQUENCE LISTING

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192 <220> FEATURE:
193 <223> OTHER INFORMATION: Description of Artificial Sequence:ribosome
194     binding site
196 <220> FEATURE:
197 <221> NAME/KEY: misc_feature
198 <222> LOCATION: 14, 15, 16, 17, 18, 19
199 <223> OTHER INFORMATION: n = a, c, t, or g
201 <400> SEQUENCE: 10
W--> 202 agaaaggagg tgannnnnna tg                                22
204 <210> SEQ ID NO: 11
205 <211> LENGTH: 25
206 <212> TYPE: DNA
207 <213> ORGANISM: Artificial Sequence
209 <220> FEATURE:
210 <223> OTHER INFORMATION: Description of Artificial Sequence:ribosome
211     binding site
213 <400> SEQUENCE: 11
214 ccctctagaa ggaggagaaa acatg                                25
216 <210> SEQ ID NO: 12
217 <211> LENGTH: 24
218 <212> TYPE: DNA
219 <213> ORGANISM: Artificial Sequence
221 <220> FEATURE:
222 <223> OTHER INFORMATION: Description of Artificial Sequence:ribosome
223     binding site
225 <400> SEQUENCE: 12
226 ccctctagag gaggagaaaa catg                                24
228 <210> SEQ ID NO: 13
229 <211> LENGTH: 23
230 <212> TYPE: DNA
231 <213> ORGANISM: Artificial Sequence
233 <220> FEATURE:
234 <223> OTHER INFORMATION: Description of Artificial Sequence:ribosome
235     binding site
237 <400> SEQUENCE: 13
238 ttagaaagga ggatttaaat atg                                23
240 <210> SEQ ID NO: 14
241 <211> LENGTH: 23
242 <212> TYPE: DNA
243 <213> ORGANISM: Artificial Sequence
245 <220> FEATURE:
246 <223> OTHER INFORMATION: Description of Artificial Sequence:ribosome
247     binding site
249 <400> SEQUENCE: 14
250 ttagaaagga ggtttaatta atg                                23
252 <210> SEQ ID NO: 15
253 <211> LENGTH: 23
254 <212> TYPE: DNA
255 <213> ORGANISM: Artificial Sequence

```

RAW SEQUENCE LISTING

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Input Set : A:\seqlist.txt

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```

257 <220> FEATURE:
258 <223> OTHER INFORMATION: Description of Artificial Sequence:ribosome
259     binding site
261 <400> SEQUENCE: 15
262 ttagaaagga ggtgatttaa atg                                     23
264 <210> SEQ ID NO: 16
265 <211> LENGTH: 23
266 <212> TYPE: DNA
267 <213> ORGANISM: Artificial Sequence
269 <220> FEATURE:
270 <223> OTHER INFORMATION: Description of Artificial Sequence:ribosome
271     binding site
273 <400> SEQUENCE: 16
274 ttagaaagga ggtgtttaaa atg                                     23
276 <210> SEQ ID NO: 17
277 <211> LENGTH: 28
278 <212> TYPE: DNA
279 <213> ORGANISM: Artificial Sequence
281 <220> FEATURE:
282 <223> OTHER INFORMATION: Description of Artificial Sequence:ribosome
283     binding site
285 <400> SEQUENCE: 17
286 attcgagaaa ggaggtgaat ataatatg                               28
288 <210> SEQ ID NO: 18
289 <211> LENGTH: 27
290 <212> TYPE: DNA
291 <213> ORGANISM: Artificial Sequence
293 <220> FEATURE:
294 <223> OTHER INFORMATION: Description of Artificial Sequence:ribosome
295     binding site
297 <400> SEQUENCE: 18
298 attcgagaaa ggaggtgaat aataatg                                  27
300 <210> SEQ ID NO: 19
301 <211> LENGTH: 28
302 <212> TYPE: DNA
303 <213> ORGANISM: Artificial Sequence
305 <220> FEATURE:
306 <223> OTHER INFORMATION: Description of Artificial Sequence:ribosome
307     binding site
309 <400> SEQUENCE: 19
310 attcgtagaa aggaggtgaa ttaatatg                               28
312 <210> SEQ ID NO: 20
313 <211> LENGTH: 51
314 <212> TYPE: DNA
315 <213> ORGANISM: Artificial Sequence
317 <220> FEATURE:
318 <223> OTHER INFORMATION: Description of Artificial Sequence:5' PCR primer
319 <223> OTHER INFORMATION: for serA gene
W--> 321 <400> 20

```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/520,210

DATE: 01/13/2005
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Input Set : A:\seqlist.txt
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:7; N Pos. ~~17,18,19,20~~
Seq#:8; N Pos. ~~16,17,18,19,20~~
Seq#:9; N Pos. ~~14,15,16,17,18,19,20~~
Seq#:10; N Pos. ~~14,15,16,17,18,19~~

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/520,210

DATE: 01/13/2005

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Input Set : A:\seqlist.txt

Output Set: N:\CRF4\01132005\J520210.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application No
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:151 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:168 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
L:185 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
L:202 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0
L:321 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20
L:333 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:21
L:345 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:22
L:357 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:23
L:369 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:24
L:515 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:25